Claims

[c1] An electrical power conversion apparatus for converting DC voltage to poly-phase AC current where the AC current is supplied directly to the electric utility grid and comprising; (i) two or more separate, pulse modulated, high frequency power converters per phase where the outputs of said power converters are summed at a common connection point substantially on the load side of the main pulse filter inductors and where (ii) the high frequency pulse train of each separate power converter is skewed or phase delayed with respect to the other converters on the same AC power phase by an amount substantially equal to 360 degrees divided by the number of converters per phase for the purpose of reducing the high frequency ripple current at said common connection point and where (iii) said separate power converters have two semiconductor switch elements connected in series across a DC power source and where the center point of the two switches is connected to said pulse filter inductor in each power converter and further comprising, (iv) a method of sensing current through said pulse filter inductors and a method of generating a substantially sinusoidal current reference value and further comprising (v) a servo loop regulation circuit for each power converter that compares the current sensed in the pulse filter inductor to said current reference value and commands the semiconductor switch elements on and off to substantially regulate sinusoidal current into the electric utility grid substantially in phase with the electric utility grid voltage.